I CLAIM:

1.   A gaming machine having a display and a game controller arranged to control images of symbols displayed on the display, the game controller being arranged to play a game wherein at least one random event is caused to be displayed on the display means and, if a predefined winning event occurs, the machine awards a prize, the gaming machine including a determining module for determining whether or not at least one further prize, following the awarding of an initial prize, is to be awarded, the determining means using the value of that initial prize in determining the probability of the player successfully winning the at least one further prize.

2.   The gaming machine of claim 1 in which the determining module is implemented in software and forms part of the game controller.

3.   The gaming machine of claim 1 in which any prize won is in the form of a number of credits and a probability of success in winning any further prize is determined based upon the average credits awarded to players of the game.

4.   The gaming machine of claim 3 in which the probability of success is determined so that the average number of credits won in respect of the game after completion of the determination of the probability of success is approximately the same as the number of credits won before the completion of the determination of the probability of success.

5.   The gaming machine of claim 1 in which the player risks losing at least a portion of the already won prize if any subsequent outcome is unsuccessful.

6.   The gaming machine of claim 1 which comprises the addition of prizes to an already won prize to determine the probability of success of winning any further prizes.

7.   The gaming machine of claim 6 in which the controller has a plurality of pathways and the player is able to choose one of the pathways as an initial step in playing the game.

8.   The gaming machine of claim 7 in which, in each subsequent step of the game, the player is able to switch from one pathway to another pathway.

9.   The gaming machine of claim 7 in which each pathway has a predetermined number of steps.

10.   The gaming machine of claim 9 in which each pathway has the same number of steps.

11.   The gaming machine of claim 9 in which a numerical constant is applied to each step in each pathway in determining the probability of successfully completing that step in the pathway if selected by the player, the numerical constant being related to an average prize won up to that point in the game.

12.   The gaming machine of claim 11 in which corresponding steps in each of the pathways have the same numerical constant associated with them.

13.   The gaming machine of claim 11 in which the numerical constants are predetermined.

14.   The gaming machine of claim 11 in which the numerical constants are determined such that the effect of a player switching pathways is obviated.

15.   A method of operating a gaming machine, the gaming machine having a display and a game controller arranged to control images of symbols displayed on the display, the game controller being arranged to play a game wherein at least one random event is caused to be displayed on the display means and, if a predefined winning event occurs, the machine awards a prize, the method including determining whether or not at least one further prize, following the awarding of an initial prize, is to be awarded by using the value of that initial prize in determining the probability of the player successfully winning the at least one further prize.

16.   The method of claim 15 in which any prize won is in the form of a number of credits and in which the method includes determining the probability of success in winning any further prize based upon the average credits awarded to players of the game.

17.   The method of claim 16 which includes determining the probability of success so that an average number of credits won in respect of the game after completion of the determination of the probability of success is approximately the same as the number of credits won before the completion of the determination of the probability of success.

18.   The method of claim 15 which includes the player risking at least a portion of the already won prize if any subsequent outcome is unsuccessful.

19.   The method of claim 15 which includes adding prizes to an already won prize to determine the probability of success of winning any further prizes.

20.   The method of claim 19 in which the controller has a plurality of pathways and the method includes allowing the player to choose one of the pathways as an initial step in playing the game.

21.   The method of claim 20 which includes, in each subsequent step of the game allowing the player to switch from one pathway to another pathway.

22.   The method of claim 21 in which each pathway has a predetermined number of steps, with each pathway having the same number of steps and in which the method includes applying a numerical constant to each step in each pathway in determining the probability of successfully completing that step in the pathway if selected by the player, the numerical constant being related to an average prize won up to that point in the game.

23.   The method of claim 22 which includes applying the same numerical constants to corresponding steps in each of the pathways.

24.   The method of claim 22 which includes predetermining the numerical constants before the game is played.

25.   The method of claim 22 which includes determining the numerical constants such that the effect of a player switching pathways is obviated.